REMARKS

Claims 1-30, 37-39 are pending in this application following the entry of this amendment. Claims 31-36 have been cancelled herein. Claims 1-2, 14-17, 20-23 and 37-39 have been amended. No new matter has been added. Applicants submit that all of the pending claims are in condition for allowance. Applicants respectfully request reconsideration of the outstanding rejections and allowance of all pending claims in view of the reasons set forth below.

I. Claim Rejections

Claims 13-15, 28, 35 and 37-39 have been rejected under 35 U.S.C. § 112 as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as his invention(Office Action, p. 2, § 4).

Claims 31-36 were rejected under 35 U.S.C. § 101 as directed to non-statutory subject matter (Office Action, p. 3, § 6).

Claims 1-11, 13, 16-26, 28, 31-35 and 39 have been rejected under 35 U.S.C. § 102(b) as as anticipated by Conway ("Parsing with C++ deferred expressions", ACM SIGPLAN Notices, vol. 29, no. 9, pp. 9-16, ACM, 1994), hereafter "Conway") (Office Action, p. 4, § 8).

Claims 12, 14, 15, 27, 29, 30 and 36-38 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Conway (Office Action, p. 8, § 10).

II. Claim Rejections under 35 U.S.C. § 112

Claims 13, 28 and 39 were rejected as including a trademark ("JAVA") as a claim limitation. Applicant respectfully traverses.

The Examiner indicated that the claim scope is uncertain because a trademark or trade name cannot be used to identify any particular material or product. Applicant respectfully

submits that the prohibition is incorrectly applied in this case as the claim element relating to the trademark can be identified with certainty. The JAVA programming language is a well-known programming language and the claim element in question is claiming a parse tree data structure written **using** JAVA. Applicant is not attempting to claim the JAVA language. Accordingly, Applicant respectfully submits that claims 13, 28 and 39 are not rendered indefinite by the appearance of the word JAVA.

Claims 14 and 15 were rejected as being indefinite. Applicant has amended claims 14 and 15 to correct an antecedent basis issue identified by the Examiner regarding the use of the term "base language" and believes the claims to be in order for allowance.

Claims 37 and 38 were rejected as indefinite for using the term "medium". Applicants have amended the claims to recite "computer-readable" medium and believes the claims to be in order for allowance.

Claim 39 was cited by the Examiner as being indefinite due to the preamble using the term "base language" and the body of the claim reciting a single base language and a plurality of base languages. Applicant respectfully traverses.

Applicant submits that the body of the claim uses the term "base language" and "plurality of base language objects" rather than a "plurality of base languages" and that there is therefore no inconsistency with the preamble. Accordingly, Applicant believes claim 39 to be in order for allowance.

III. Claim Rejections under 35 U.S.C. § 101

Claims 31-36 were rejected as being directed to non-statutory subject matter. Claims 31-36 have been canceled herein and Applicant submits that the rejections are therefore moot.

IV. Claim Rejections under 35 U.S.C. § 102(b)

Claims 1-11, 13, 16-26, 28, 31-35 and 39 have been rejected under 35 U.S.C. § 102(b) as as anticipated by Conway. Applicant respectfully traverses.

Claim 1 as amended recites:

"In a program development environment, a method comprising the steps of:

providing, via a programming language, a **language processor with built-in support for a parse tree data structure** written in a base language, said **parse tree data structure represented as a class,** said class being the basis for a plurality of parse tree objects, said parse tree objects including methods that retrieve values for base language objects;

defining an assignment function, said assignment function taking a plurality of parse tree structures as arguments; and

calling said assignment function to determine the value of at least one assignment within at least one of said base language and a base language extension to said base language."
[emphasis added]

Applicant's claim 1 as amended recites **providing a language processor** for a base language **that includes built-in support** for a parse tree data structure written in the base language. In contrast, the Conway reference describes a separate application that is written to provide the functionality claimed by Applicant. The Examiner cites ¶ 1 and ¶ 2 of "The Deferred Expression Idiom" section on page 9 of the Conway reference as disclosing the previous version of the first claim element, namely "providing a parse tree data structure written in a base language" (see OA, page 4). As set forth on page 9, the Conway system is similar to the Van Wyck system which "describes a technique for building a set of classes which encode and solve simultaneous equations specified in a declarative manner within a C++ program. The technique overloads common operations…causing such operators not to perform the corresponding operation but to generate an object which represents the operation. Such representative objects can then be passed to a suitable modified constraint solver[3] in which the operations they represent may be evaluated at need." Conway extends the Van Wyck system by using overloaded operators to generate objects that represent the parse tree of an expression. The generated objects belong to separate parser class that is part of a Parser library.

In Applicant's claimed invention, the support for the use of the parse objects to overload operators is built into the programming language. This built-in support differs dramatically from the system described in Conway which requires the use of a separate parser library that must be specifically referenced in order to be included in the written source code (See Figure 1 "include Parser.h" statement). This represents a significant difference from the claimed invention which does not require calls to external libraries and offers efficiency improvements as a result.

Accordingly, for at least these reasons, Applicant submits that claim 1 is in condition for allowance.

Claims 2-11 depend on claim 1 and include all of its elements and Applicant submits that claims 2-11 are therefore also in condition for allowance.

Amended independent claims 16 and 39 also recite "a language processor with built-in support for a parse tree data structure" and are therefore allowable for the same reasons set forth above with regard to claim 1.

Claims 17-26 and 28 depend on claim 16 and include all of its elements and Applicant submits that claims 17-26 and 28 are therefore also in condition for allowance.

Claims 31-35 have been cancelled herein and the rejections directed to claims 31-35 are therefore moot.

IV. Claim Rejections under 35 U.S.C. § 103(a)

The Examiner relies upon Conway to reject claims 12, 14, 15, 27, 29, 30 and 36-38 under 35 U.S.C. § 103(a) as being unpatentable for obviousness. The Examiner stated that "while Conway did not disclose the limitations of claim 12 (an assignment function used to perform multiply and accumulate (MAC) operations), and claims 29 and 30 (using parse tree

classes for an embedded processor and processor emulation), the limitations would have been obvious modifications to the Conway system" (OA, page 9). The Examiner rejects claims 14 and 15 as corresponding to claims 29 and 30 respectively. The Examiner also rejects claim 27 as corresponding to claim 12 and rejects claims 37 and 38 for the same reasons as he rejected claims 14 and 15. Claim 36 is canceled and the rejection directed to claim 36 is therefore moot. Applicants respectfully traverse the rejections.

Claims 14-15 and 37-38 are independent claims and have been amended to recite "a language processor with (having) built-in support for a parse tree data structure". As discussed above in connection with claim 1, this claim element is not disclosed by Conway. This feature is further not disclosed or suggested by Conway, which is directed to the design of external class parser libraries. Accordingly, Conway does form a valid §103 rejection and Applicant therefore submits that claims 14-15 and 37-38 are in condition for allowance.

Claims 12, 27 and 29-30 are dependent claims which depend from independent claims reciting "a language processor with built-in support for a parse tree data structure" and are therefore also in condition for allowance for the same reasons set forth above with respect to claims 14-15 and 37-38.

CONCLUSION

In view of the above Amendment and remarks, Applicant believes the pending application is in condition for allowance.

Applicant believes a one month extension fee is due with this amendment. However, if additional fees are due please charge our Deposit Account No. 12-0080 under MWS-039 from which the undersigned is allowed to draw.

Dated: November 2, 2007

Respectfully submitted,

By_____/jsc/_____

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